

Practical Steps to Energy Independence

compiled by Jonna Rae Bartges



The City of San Diego's first energy efficient building officially opened in October 2002.

When Thomas B. Blair II stepped into his new post as San Diego's Energy Conservation and Management Administrator in February of 2002, he had two key goals. First, check out the city's track record for using energy. Second, improve it.

Blair, a former Navy commander with a Master's degree in business administration, was up for the challenge. Due in no small part to Blair's leadership, San Diego has emerged as a national model in energy conservation and management.

Last year San Diego's Environmental Services Operation Station became the first "energy independent" municipal building. The 468 photovoltaic (PV) panels installed produce approximately 91,950 kilowatt-hours per year for the administration building, which currently uses 87,000 kilowatt-hours of energy per year. The City will save \$16,551 annually in energy expenses.

Another big project on the agenda, says Blair, is the San Diego Police Headquarters retrofit. The \$6.3 million estimated project cost will be reduced by almost \$719,000 in State and industry cash incen-

tives. Anticipated energy cost savings are estimated at more than \$600,000 annually. The project was approved by City Council in January of this year.

Also, the City Council has adopted the Leadership in Energy Efficiency Design (LEED) Silver Level as the design criteria for new municipal construction and remodels over 5,000 square feet. City buildings meeting the new criteria will be 12-17 percent more energy efficient, economical to operate, and friendlier to both the environment and workers than the previous standard. Blair and his staff will review municipal building plans during construction to ensure the new standard. The international LEED system is promoted by the nonprofit "<http://www.usgbc.org/>" US Green Building Council, based in Washington, D.C.

One way Blair is helping to raise awareness about advantages of the LEED criteria is through a series of seminars. The next LEED Intermediate Training Workshop for architecture, engineering and construction

professionals is Tuesday, July 15, 8:30am-5pm, at the Ridgehaven Building, 9601 Ridgehaven Court, San Diego. Participants will learn how to incorporate green design into their practice, and learn more about sustainable building practices. To register, log on to www.usgbc.org.

One of the jewels in the crown of San Diego's energy efficient agenda is the Ridgehaven Building itself, home to the city's Environmental Services Department. In a complete retrofitting, the building was renovated with construction materials made of substantial recycled content, and materials that minimize the growth of mildew, mold and bacteria. Heating, ventilation and air conditioning systems were replaced to increase efficiency of the equipment and provide high-quality indoor air.

Water conservation technology transformed the restrooms into state-of-the-art efficient facilities, and innovative lighting techniques resulted in a net reduction of about 52% in watts per square foot over what is allowed by the state building code for similar office structures.

Positive results were immediately evident. In 2000, Ridgehaven's energy savings were almost \$200,000. Visitors from across the nation and more than 45 countries have toured the renovated facility, which was honored as the country's first Energy Star Label building.

Under "Energy Czar" Blair's direction, the city has decreased overall electrical usage 13 percent, saving \$3.2 million in energy bills. In innovative programs developed by Blair and his team, many of the lessons learned by retrofitting the city's buildings can also mean energy savings for San Diego residents.

The city's innovative Whole House Energy Retrofit Program, says Blair, promises financial rewards to owners of older homes—both in terms of rebates, and